UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
2175	4

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-20_ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-20_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121

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Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _2_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

   Claim 12 recites the limitation "said fourth process" in line 4. There is insufficient antecedent basis for these limitations in the claim.

   Claim 12 recites the limitation "said third process" in line 5. There is insufficient antecedent basis for these limitations in the claim.

   For the purpose of examination, the examiner is making the assumption that the term "process" mentioned above is meant to be "step". Appropriate correction is required.

   Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being dependent from the rejected dependent claim 12.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Iizuka (U.S. Patent

No. 5,664,030.)

As to claim 1, Iizuka teaches an image encrypting method (see Abstract, where

"encrypting" is read on "encoding" and "scrambling"), comprising:

a first process of inputting an image by reading an image file expressing the image (see

column 2, lines 46-48);

a second process of dividing the image file into portion image data of a predetermined

unit (see column 2, lines 49-64);

a third process of generating information incidental to the portion image data (see column

11, line 62 through column 12, line 10), the incidental information including boundary

information which expresses boundary dividing respective the portion image data (see

column 17, lines 30-65, and see column 19, lines 28-55); and

a fourth process of encrypting the portion image data, wherein image-handling of the

portion image data is performed on the basis of the incidental information (see column 25,

line 30 through column 26, line 52, where "encrypting" is read on "scrambling".)

As to claim 2, Iizuka teaches the method further comprising:

a fifth process of generating an encrypted image file from encrypted portion image data

generated in the fourth process and the incidental information generated in the third process

(see column 25, lines 63-67, where "portion" is read on "positional relationship".)

As to claims 3, 8, 13, and 18, Iizuka teaches wherein the encrypted image file (see

Abstract) includes a plurality of marking means (see column 3, lines 38-42), each of the

marking means being attached to respective encrypted portion image data (see column 19,

lines 20-27) so as to identify respective boundaries between the encrypted portion image data

in the encrypted image file (see column 19, lines 28-35.)

As to claim 4, Iizuka teaches wherein the incidental information is encrypted, and an

encrypted image file including encrypted portion image data and encrypted incidental

information is generated in the fourth process (see column 25, line 30 through column 26,

line 52, where "encrypting" is read on "scrambling".)

As to claims 5, 10, 15, and 20, Iizuka teaches wherein the incidental information includes

each position information of respective encrypted portion image data in the encrypted image

file and each size information of respective the encrypted portion image data (see column 25,

line 62 through column 26, line 46, where "scrambled" is read on "encrypted".)

As to claim 6, Iizuka teaches an image encrypting device (see Abstract, where "encrypting" is read on "encoding" and "scrambling"), comprising:

inputting means which inputs an image by reading an image file expressing the image (see column 2, lines 46-48);

image portion unit dividing means which divides the image file into portion image data of a predetermined unit (see column 2, lines 49-64);

encrypting means which encrypts the portion image data (see column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling");

identifier generating means which generates information incidental to the portion image data (see column 11, line 62 through column 12, line 10), the incidental information which expresses boundary dividing respective the portion image data (see column 17, lines 30-65, and see column 19, lines 28-55); and

file generating means which generates an image file on the basis of the portion image data encrypted by the encrypting means and the incidental information generated by the identifier generating means, wherein image-handling of the portion image data is performed on the basis of the incidental information (see column 25, line 30 through column 26, line 52.)

As to claim 7, Iizuka teaches, wherein the image file generated by the generating means is an encrypted image file (see column 25, lines 30-62, where "encrypted" is read on "scrambled".)

As to claim 9, Iizuka teaches wherein the encrypting means encrypts the incidental information, and the file generating means generates the image file on the basis of the portion image data encrypted by the encrypting means and the incidental information encrypted by the encrypting means (see column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling".)

As to claim 11, Iizuka teaches a recording medium (see Abstract) on which are recorded image encrypting procedures (see column 2, lines 37-45. For the remaining steps of this claim, the applicant is directed to discussions and remarks made in claims 1 and 6 above.)

As to claims 12 and 17, Iizuka teaches generating an encrypted image file from encrypted portion image data generated in the fourth process and the incidental information generated in the third process (see column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling".)

As to claims 14 and 19, Iizuka teaches wherein the incidental information is encrypted, and an encrypted image file including encrypted portion image data and encrypted incidental information is generated in the fourth step (see column 25, line 30 through column 26, line 52, where "encrypting" is read on "scrambling".)

As to claim 16, Iizuka teaches a recording medium (see Abstract) on which an encrypted image file is recorded (see column 2, lines 37-45), the encrypted image file being generated

(for the remaining steps of this claim, the applicant is directed to discussions and remarks

made in claims 1 and 6 above.)

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

The following patents are cited to further show the state of art with respect to methods

and systems of Image processing, image encryption, image recording, and image storage in

general:

Patent No.	Issued to	Cited for teaching
US 5,502,576	Ramsay et al.	High speed conversion of documents into images.
US 5,748,805	Withgott et al.	Image identification and image encryption.

6. Any inquiries concerning this communication or earlier communications from the examiner

should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The

examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Dov Popovici, can be reached at (703) 305-3830.

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July 25, 2003

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